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| BLAIR RUBBER COMPANY<br>INNOVATION TO MAKE IT FIRST, QUALITY TO MAKE IT LAST. | **Document Type:** | MSDS | **Document #:** | MSDS179 |
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| | **Page #:** | 1 of 5 | **Revision/Review Date:** | 4/1/2013 |

# Material Safety Data Sheet
# *CIM 61BG Epoxy Hardener*

## 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

**Trade Names:** CIM 61BG Epoxy Hardener

**Description:** Phenolic Polyamine Cross Linker for Epoxy Resin

**Company Identification:** Blair Rubber Company
5020 Panther Parkway
Seville, OH 44273

**Emergency Phone Number:** 800-424-9300

**International Number:** 202-483-7616

**Information Number:** 330-336-6604

## 2. COMPOSITION/INFORMATION ON THE HAZARDOUS COMPONENTS

| | | | ACGIH | | OSHA | | |
|---|---|---|---|---|---|---|---|
| **Hazardous Components** | **CAS No.** | **Wt. %** | **TWA** | **STEL** | **TWA** | **STEL** | **Primary Hazard** |
| Alkylated Phenolic Polyamine | 68413-28-5 | 70-80 | | | 2 | | Irritant |
| Alkylated Phenolic Polyamine | 68413-29-6 | 5-10 | | | | | Irritant |
| Ethylenediamine | 107-15-3 | 1.0-5.0 | 10 | | 10 | | Irritant/Corrosive |
| Ethyl Benzene | 100-41-4 | 0.1-1.0 | 100 | 125 | 100 | 125 | Flammable/Solvent Effects |
| Xylene | 1330-20-7 | 10-20 | 100 | 150 | 100 | 150 | Flammable/Solvent Effects |

**CAUTION: Flammable Liquid – Keep out of reach of children! May cause eye, skin, and respiratory irritation. Prolonged or repeated contact with skin and inhalation can be harmful.**

## 3. PHYSICAL AND CHEMICAL PROPERTIES

| | | | | | |
|---|---|---|---|---|---|
| **Appearance:** | Clear Amber | **Physical State:** | Liquid | **Boiling Point:** | 200°F / 93°C |
| **Specific Gravity:** | 0.980 | **Solubility in H2O:** | NA | | |
| **Vapor Pressure:** | NA | **Vapor Density:** | Heavier than air | | |
| **Melting Point:** | NA | **Percent Volatiles:** | < 17% | | |

**Note:** The physical data presented above are typical values and not to be construed as a specification

## 4. FIRE AND EXPLOSION HAZARD

**Flash Point:** 80°F / 27°C **Autoignition:** No data available
**Flammability Limits:** 1% lower limit, 6.6% upper limit

**EXTINGUISHING MEDIA:** $CO_2$, Dry chemical or foam, Water fog

**FIRE FIGHTING PROCEDURES:** Water may be used to cool and protect exposed containers. Firefighters should

use full protective clothing, eye protection, and self-contained breathing apparatus. Self-contained breathing apparatus recommended.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Closed containers may explode when exposed to extreme heat or fire. Vapors may ignite explosively at ambient temperatures. Vapors are heavier than air and may travel long distances to a source of ignition and flash back. Vapors can form explosive mixtures in air at elevated temperatures. May decompose under fire conditions emitting irritant and/or toxic gases.

## 5. REACTIVITY DATA

**CHEMICAL STABILITY:** Under normal conditions stable. See Fire Fighting Measures.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Elevated temperatures, contact with oxidizing agent, sparks, open flame, ignition sources.

**INCOMPATIBILITY WITH OTHER MATERIALS:** Oxidizers, acids, bases, amines, epoxides, nitric acid.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, Carbon dioxide, Oxides of Nitrogen

## 6. HEALTH HAZARDS IDENTIFICATION

**NFPA Hazard Rating**

| | | | | |
|---|---|---|---|---|
| Health – 3 | Flammability – 3 | Reactivity - 1 | Special - 0 | Class II |

**PRIMARY ROUTES OF EXPOSURE:** Eye, Skin, Inhalation (breathing), Ingestion (swallowing).

**EYE CONTACT:** Irritation of eyes. Prolonged or repeated contact can cause conjunctivitis, blurred vision, tearing of eyes, redness of eyes, severe eye irritation or burns, corneal injury.
**SKIN CONTACT:** Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting, blistering, allergic response, severe skin irritation or burns. Possible sensitization to skin. $LD_{50}$ (rabbit) > 1 g/kg.
**INHALATION (Breathing):** Possible sensitization to respiratory tract. Prolonged inhalation may lead to fatigue, drowsiness, dizziness and/or light headedness, headache, un-coordination, nausea, vomiting, blurred vision, coughing, difficulty with speech, central nervous system depression, anesthetic effect or narcosis, difficulty of breathing, asthmatic reaction, tremors, respiratory tract burns, liver damage, kidney damage, loss of consciousness, respiratory failure, asphyxiation, death.
**INGESTION (Swallowing):** Ingestion may cause lung inflammation and damage due to aspiration of material into lungs, dizziness and/or light headedness, nausea, vomiting, diarrhea, gastro-intestinal disturbances, severe abdominal pain, central nervous system depression, burns of the mouth, throat, stomach, liver damage, kidney damage, pulmonary edema. $LD_{50}$ (rat) > 4 g/kg.

**EMERGENCY AND FIRST AID PROCEDURES:**

**EYE CONTACT:** Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

**SKIN CONTACT:** Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable/mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing before re-use. Dispose of contaminated leather items, such as shoes and belts. If irritation occurs, consult a physician.

**INHALATION (Breathing):** Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty.

**INGESTION (Swallowing):** Do not induce vomiting. Obtain medical treatment immediately.

## 7. PRECAUTIONS FOR SAFE HANDLING AND USE

**ACCIDENTAL RELEASE AND/OR SPILL MEASURES:** Steps to be taken in case of material is released or spilled – comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Ventilate area with explosion-proof equipment. Spills may be collected with absorbent materials. Use non-sparking tools. Evacuate all unnecessary personnel. Place collected material in proper container. Complete personal protective equipment must be used during clean-up. Large spills – shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills – Use water out of sewers and water courses. Small spills – use absorbent to pick up residue and dispose of properly.

**WASTE DISPOSAL METHOD:** Dispose in accordance with all applicable regulations. Avoid discharges to natural waters.

**ENVIRONMENTAL IMPACT:** This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Read and observe all precautions on product label. Do not use or store near flame, sparks, or hot surfaces. Use only in well-ventilated area. Keep container closed. Do not weld, heat or drill container. Emptied container still contains hazardous or explosive vapor or liquid. Store below 80°F. Store product in accordance with local regulations. Do not exceed indoor limits for storage of Class II flammable liquids.

## 8. CONTROL MEASURES

**RESPIRATORY PROTECTION:** Use in well ventilated areas only. Wear OSHA approved type C air supplied respirator if ventilation is inadequate to keep solvent inhalation vapors below the TLV. Particulate, chemical cartridge, air purifying half-mask respirators can be used within certain limitations; consult the respirator manufacturer for specific uses and limitations. Where airborne contaminate concentrations are unknown, the use of a NIOSH/MSHA approved fresh-air supplied respirator is mandatory.

**PROTECTIVE GLOVES:** Skin contact can be minimized by wearing protective clothing and chemical resistant gloves. Use protective cream where skin contact is likely.

**EYE PROTECTION:** Wear chemical resistant safety goggles.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Avoid airborne mists which can be inhaled or swallowed. Use protective mask, if necessary.

## 9. Transport Information

| | | | |
|---|---|---|---|
| **DOT Label:** | Corrosive Liquid, Flammable, n.o.s. (xylene, polyamines) | **UN Number:** | UN2920 |
| **Hazard Class:** | 8 | **Packaging Group:** | II |

## 10. ADDITIONAL HEALTH DATA

CIM 61BG Epoxy Hardener is used with CIM 61BG Resin to form an epoxy coating formulated as a primer on porous and non-porous surfaces such as concrete and metal. Consult the MSDS for CIM 61BG Epoxy Resin. This product does not contain constituents known to be a carcinogen, mutagen, teratogen, or reproductive toxin. This product contains certain aromatic solvents subject to the reporting requirements of section 313 of SARA Title III. Spills in excess of 10,000 lb. must be reported to the appropriate federal, state, and local authorities. Contains a chemical that is

toxic by ingestion. Contains a chemical that may be absorbed through the skin.

Notice-Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Other effects of overexposure may include toxicity to liver, kidney, central nervous system.

Based on an International Agency for Research on Cancer (IARC) Conclusion that there is "sufficient evidence in experimental animals for the carcinogenicity of ethyl benzene and inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that ethyl benzene is possibly carcinogenic to humans" (Group 2B).

High exposure to Xylene in some animal studies, often at maternally toxic levels, have affected embryo/fetal development. The significance of this finding to humans is not known.

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## 11. OTHER INFORMATION/ADDITIONAL COMMENTS

**USERS RESPONSIBILITY:** A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions - in addition to those described herein- are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

**DISCLAIMER OF LIABILITY:** The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

The ingredients listed Composition/Information on the Components Section are embedded in the product and are provided for information.

**Blair Rubber Company provides the information herein compliance with Federal hazard communication standard, 29 CFR 910.1200, to give warning of actual and assumed hazards, and to inform of generally applicable precautions and control measures which are known to Blair Rubber Company. Hazard information is based on available scientific evidence, but is not always obtained from sources under the direction or control of Blair Rubber Company. Blair Rubber Company makes no warranty or representation that the information is accurate, reliable, complete or representative and Buyer may rely thereon only at Buyer's own risk. Blair Rubber Company warrants only that it has made no effort to censor other than trade secret information or to conceal hazards of its products. The data shown on these pages in no way modifies amends or enlarges any specification or warranty.**